

## REMARKS

Claims 23-57 are pending in the application. Claims 1-22 and 25 have been cancelled by this or previous amendments. Claims 48-57 have been added.

Claim 23 has been amended by the adding the phrase “a biologically pure.” Support for this amended is found throughout the specification and specifically, for example, page 10, line 19 of the specification as originally filed.

Claim 23 has been amended by deleting the phrase “having substantially the same” and replacing it with “displaying at least 97.0% similarity to a 16S ribosomal RNA sequence.” Support for this amendment can be found throughout the specification and specifically, for example, page 53, line 5, as well as page 56, line 20 to page 57, line 19 of the specification. In addition, a feature of claim 26 that relates to growth rate has been combined with claim 23 by the addition of the phrase “and a growth rate of at least 0.938 h<sup>-1</sup>.” Support for this amendment can be found throughout the specification and specifically, for example, page 68, line 9.

Claim 26 has been amended by deleting the term “efficiently” and replacing it with the phrase “at a rate of between 40% and 90%.” Support for this amendment can be found throughout the specification and specifically, for example, on Table 3, page 41.

Claims 48-50 have been added. Support for these claims can be found in claim 26, which has been amended to delete the phrase “resistance to ionophores; its relatively high growth rate; its capability to produce predominantly acetate; and its capability to proliferate at pH values as low as 4.5.” In addition, support for new claim 50 can be found throughout the specification and specifically, for example, page 67, lines 21 and 22.

Claim 40 has been amended to depend from claim 23 and to delete the following phrases: “...dilution rate...”, “...a superior ruminal microorganism...”, and “...in a relatively shorter time period than conventional methods, the method...”. Furthermore, the word “inferior” has been replaced with the word “other” in order to more clearly define amended claim 42.

New claims 51 to 57 have been added to define the parameters contained in amended claim 40.

Amended claim 51 lists the pre-selected growth mediums used, while new claim 52 lists the growth medium constituents used. Support for these new claims can be found throughout the specification and specifically, for example, on page 17, lines 5 to 23, page 19, lines 13 to page 20, line 23, page 21, line 20, page 25, line 6, a table on page 30 and page 64, line 5 of the specification.

Support for new claim 53 can be found throughout the specification and specifically, for example, on page 39, line 8 to page 40, line 15 and page 61, lines 13 to 19 of the specification.

Support for new claim 54 can be found throughout the specification and specifically, for example, on pages 19 and 63, lines 21 and 16, respectively, of the specification.

Support for new claim 55 can be found throughout the specification and specifically, for example, on page 20, line 13 of the specification.

Support for new claim 56 can be found throughout the specification and specifically, for example, on page 22, line 15.

Support for new claim 57 can be found throughout the specification and specifically, for example, on page 15, line 21 to page 16, line 4 of the specification.

Rejection under 35 U.S.C. §112, second paragraph

Claims 23, 26 and 40 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because of the phrase “substantially the same 16S ribosomal RNA sequence” and the terms “superior” and “inferior.”

With the amendment to claims 23, 26 and 40, Applicants respectfully submit that the rejection is now moot.

Rejection under 35 U.S.C. § 101

Claims 23-39 stand rejected under 35 U.S.C. § 101 as directed to a non-statutory subject matter. Claim 1 has been amended to add the phrase “a biologically pure” bacterial culture. With this amendment, Applicants respectfully submit that the rejection has been traversed. *See In re Bergstrom*, 427 F.2d 1394, 166 USPQ 256 (CCPA 1970) (pure materials are by definition novel as compared to impure materials). Thus, biological material is patentable if it is in a purified or concentrated form and therefore not previously described. Accordingly, Applicants request that the rejection be withdrawn.

Rejection under 35 U.S.C. § 102

Claims 23 and 40-47 stand rejection under 35 U.S.C. § 102(b) as been anticipated by Leedle, *et al.* (U.S. Patent 5,380,525). Leedle, *et al.* shows a bacterial organism having a specific growth rate of 0.644 h-1 (see page 12, table 5).

Claim 23, as amended, is directed to a microorganism having a growth rate of at least 0.938 h-1. Accordingly, Leedle, *et al.* does not teach each and every element of claim 23. Claim 40 has been amended to depend from claim 23. Accordingly, because Leedle, *et al.* does not

teach each and every element of claim 23, or the claims depending therefrom, Leedle, *et al.* does not anticipate these claims. Accordingly, Applicants request that the rejection be withdrawn.

Rejection under 35 U.S.C. § 103

Claims 23-47 stand rejected under 35 U.S.C. § 103 as been unpatentable over Leedle, *et al.* Applicants respectfully disagree.

Claim 23 has been amended to reflect that the growth rate for the microorganism is 0.938 h-1. Original claims 40 to 47 have been amended to reflect a method of isolation a M. elsdenii according to claim 23. An organism with this growth rate is not taught or suggested by Leedle, *et al.* In addition, Leedle *et al.* teaches at page 5, line 5, to grow isolates in the presence of 2-deoxyglucose, which functions as an energy source, as well as to inhibit organisms relying on glucose, maltose or lactic acid. Claim 26 has been amended to reflect that the organism is capable of growing even in the presence of these sugars.

The Examiner reasoning for the rejection is simply a conclusory statement that, since other M elsdenii bacteria culture are known, the presently claimed culture must be obvious. See Office Action, pp. 5-6. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) cited with approval in KSR Int’l v. Teleflex Inc., 127 S. Ct. 1727, 82 USPQ2d 1385 (2007). The Examiner has failed to provide any rational for his conclusion.

Applicants respectfully submit that without some articulated reasoning with a rational underpinning to support the Examiner’s conclusion, the present rejection based upon 35 U.S.C. § 103 cannot be sustained. Accordingly, Applicants request that the rejection be withdrawn.

## CONCLUSION

With the above amendments and remarks, Applicants respectfully submit that the application is now in condition for allowance. If the Examiner is of the opinion that a telephone conference would expedite the prosecution of the application, the Examiner is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,

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